

Please amend the claims as follows.

Claim 128. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said at least two microphones and said signal processing circuitry being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones; and

a case for housing said at least two microphones and said signal processing circuitry, wherein said case is mounted on a mounting side of an acoustical barrier, the acoustical barrier comprising an interior surface of a passenger vehicle.

Claim 129. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said at least two microphones and said signal processing circuitry being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry, wherein said case is mounted on a mounting side of an acoustical barrier; and

at least one sealing gasket located between said case and the mounting side of the acoustical barrier.

Claim 130. (Previously Presented) The microphone assembly according to claim 129 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 131. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said at least two microphones and said signal processing circuitry being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry; and
at least two protective screens located between an inner surface of the case and the at least two microphones.

Claim 132. (Previously Presented) The microphone assembly according to claim 131 wherein the case is mounted on a mounting side of an acoustical barrier.

Claim 133. (Previously Presented) The microphone assembly according to claim 132 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 134. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said at least two microphones and said signal processing circuitry being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry, wherein said case is mounted on a mounting side of an acoustical barrier; and

a covering located on at least a portion of a pick-up side of the acoustical barrier.

Claim 135. (Previously Presented) The microphone assembly according to claim 134 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 136. (Currently Amended) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal, said signal processing circuitry comprising circuitry for generating at least one pattern signal, said circuitry comprising at least two high-pass roll-off filters and a differencing circuit, the differencing circuit comprising at least two gain adjusters for trimming out mid-band amplitude sensitivity differences in the at least two microphones; and

said at least two microphones and said signal processing circuitry being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones.

Claim 137. (Cancelled)

Claim 138. (Previously Presented) The microphone assembly according to claim 136 further comprising a case for housing said at least two microphones and said signal processing circuitry.

Claim 139. (Previously Presented) The microphone assembly according to claim 138 wherein the case is mounted on a mounting side of an acoustical barrier.

Claim 140. (Previously Presented) The microphone assembly according to claim 139 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 141. (Currently Amended) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal and generating an additional output signal having an extended low frequency response in comparison to the assembly output signal; **and**

said at least two microphones and said signal processing circuitry being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry, wherein said case is mounted on a mounting side of an acoustical barrier, the acoustical barrier comprises an interior surface of a passenger vehicle; and

at least one sealing gasket located between said case and the mounting side of the acoustical barrier.

Claim 142. (Cancelled)

Claim 143. (Cancelled)

Claim 144. (Cancelled)

Claim 145. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said signal processing circuitry limiting adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones; and

a case for housing said at least two microphones and said signal processing circuitry, wherein said case is mounted on a mounting side of an acoustical barrier, the acoustical barrier comprising an interior surface of a passenger vehicle.

Claim 146. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said signal processing circuitry limiting adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry, wherein said case is mounted on a mounting side of an acoustical barrier; and

at least one sealing gasket located between said case and the mounting side of the acoustical barrier.

Claim 147. (Previously Presented) The microphone assembly according to claim 146 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 148. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said signal processing circuitry limiting adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry; and

at least two protective screens located between an inner surface of the case and the at least two microphones.

Claim 149. (Previously Presented) The microphone assembly according to claim 148 wherein the case is mounted on a mounting side of an acoustical barrier.

Claim 150. (Previously Presented) The microphone assembly according to claim 149 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 151. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said signal processing circuitry limiting adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry, wherein said case is mounted on a mounting side of an acoustical barrier; and

a covering located on at least a portion of a pick-up side of the acoustical barrier.

Claim 152. (Previously Presented) The microphone assembly according to claim 151 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 153. (Currently Amended) A microphone assembly comprising:
at least two microphones, each of said at least two microphones receiving sound energy
and generating electrical signals corresponding to the sound energy received;
signal processing circuitry, said signal processing circuitry processing the electrical
signals into an assembly output signal, said signal processing circuitry comprises circuitry for
generating at least one pattern signal, the circuitry comprising at least two high-pass roll-off
filters and a differencing circuit, the differencing circuit comprises at least two gain adjusters for
trimming out mid-band amplitude sensitivity differences in the at least two microphones; and
said signal processing circuitry limiting adverse effects on the assembly output signal
from amplitude and phase mismatches between the at least two microphones.

Claim 154. (Cancelled)

Claim 155. (Previously Presented) The microphone assembly according to claim 153 further
comprising a case for housing said at least two microphones and said signal processing circuitry.

Claim 156. (Previously Presented) The microphone assembly according to claim 155
wherein the case is mounted on a mounting side of an acoustical barrier.

Claim 157. (Previously Presented) The microphone assembly according to claim 156
wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 158. (Currently Amended) A microphone assembly comprising:
at least two microphones, each of said at least two microphones receiving sound energy
and generating electrical signals corresponding to the sound energy received;
signal processing circuitry, said signal processing circuitry processing the electrical
signals into an assembly output signal and generating an additional output signal having an
extended low frequency response in comparison to the assembly output signal; and
said signal processing circuitry limiting adverse effects on the assembly output signal
from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry, said
case is mounted on a mounting side of an acoustical barrier, the acoustical barrier comprises an
interior surface of a passenger vehicle; and
a covering located on at least a portion of a pick-up side of the acoustical barrier.

Claim 159. (Cancelled)

Claim 160. (Cancelled)

Claim 161. (Cancelled)

Claim 162. (Previously Presented) A microphone assembly comprising:
at least two microphones, each of said at least two microphones receiving sound energy
and generating electrical signals corresponding to the sound energy received;
signal processing circuitry, said signal processing circuitry processing the electrical
signals into an assembly output signal;
said at least two microphones being configured to limit adverse effects on the assembly
output signal from amplitude and phase mismatches between the at least two microphones; and
a case for housing said at least two microphones and said signal processing circuitry,
wherein the case is mounted on a mounting side of an acoustical barrier, the acoustical barrier
comprising an interior surface of a passenger vehicle.

Claim 163. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said at least two microphones being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry, wherein the case is mounted on a mounting side of an acoustical barrier; and

at least one sealing gasket located between said case and the mounting side of the acoustical barrier.

Claim 164. (Previously Presented) The microphone assembly according to claim 163 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 165. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said at least two microphones being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry, wherein the case is mounted on a mounting side of an acoustical barrier; and

a covering located on at least a portion of a pick-up side of the acoustical barrier.

Claim 166. (Previously Presented) The microphone assembly according to claim 165 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.

Claim 167. (Currently Amended) A microphone assembly comprising:

at least two microphones, the at least two microphones have low-frequency cutoff frequencies that are closely matched and each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said at least two microphones being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones; and

wherein the at least two microphones have low-frequency cutoff frequencies that are closely matched

a case for housing said at least two microphones and said signal processing circuitry, wherein said case is mounted on a mounting side of an acoustical barrier, the acoustical barrier comprises an interior surface of a passenger vehicle; and

at least two protective screens located between an inner surface of the case and the at least two microphones.

Claim 168. (Previously Presented) The microphone assembly according to claim 167 wherein closely matched comprises mismatches of no greater than approximately 1/15 of the 300Hz lower frequency limit of a useful assembly frequency range.

Claim 169. (Cancelled)

Claim 170. (Cancelled)

Claim 171. (Cancelled)

Claim 172. (Previously Presented) A microphone assembly comprising:

at least two microphones, each of said at least two microphones receiving sound energy and generating electrical signals corresponding to the sound energy received;

signal processing circuitry, said signal processing circuitry processing the electrical signals into an assembly output signal;

said at least two microphones being configured to limit adverse effects on the assembly output signal from amplitude and phase mismatches between the at least two microphones;

a case for housing said at least two microphones and said signal processing circuitry; and at least two protective screens located between an inner surface of the case and the at least two microphones.

Claim 173. (Previously Presented) The microphone assembly according to claim 172 wherein the case is mounted on a mounting side of an acoustical barrier.

Claim 174. (Previously Presented) The microphone assembly according to claim 173 wherein the acoustical barrier comprises an interior surface of a passenger vehicle.